

Product Profile

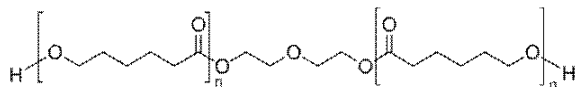
Identification

Product Name: Poly(ϵ -Caprolactone)

Product Lot Number: P41209-CL

CAS #: 24980-41-4

Chemical Architecture:



Composition:

Mn (g/mole)	2,000
Mw (g/mole)	2,400
Mw/Mn	1.15
dn/dc (mL/g) in THF at 30 °C	0.030

Method of Synthesis

The polymer is synthesized by ring opening polymerization process.

Solubility in different solvents:

THF	√	DMF	√
Alcohol	X	CHCl ₃	√
Toluene	√	Water	X

Validation of Architecture

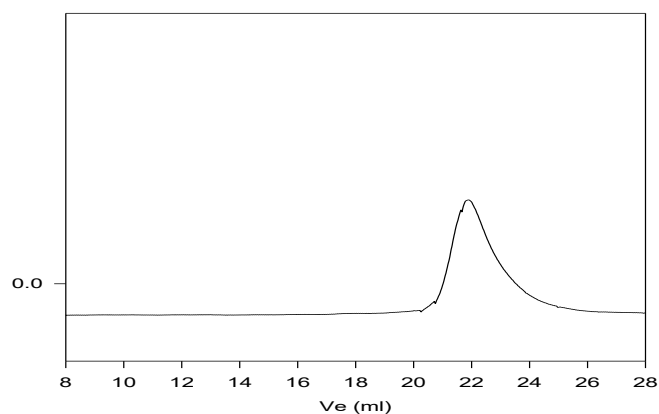
A. Gel Permeation Chromatography (GPC), SEC Profile:

Molecular weights were determined by Agilent Technologie 1260 Infinity II GPC/SEC System equipped with Triple detector (RI, Viscometer, RALS 90° and LS 15°) and three columns (PLgel, 7.5x300 mm, 5 μ m-10 μ m, 10⁵-10⁶Å). THF (stabilized BHT) with 1%(v/v%) TEA was the eluent. The flow rate was 1.0 ml/min.



Polymer Source,™ Inc.

P41209-CL



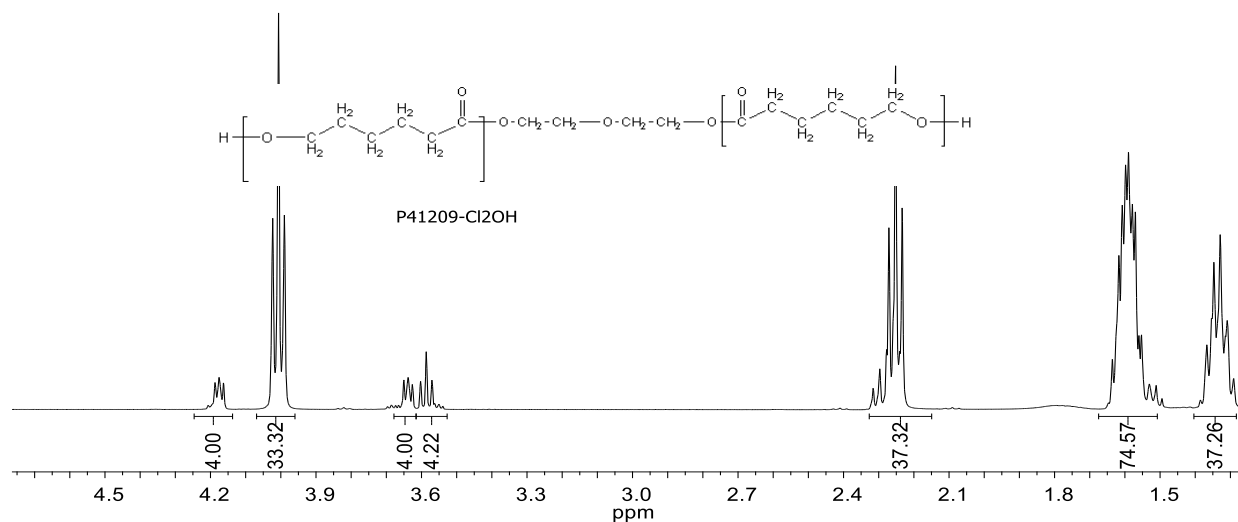
Size exclusion chromatography result:

— $M_n=2,000$, $M_w=2,400$ $PI=1.15$ by SEC (M_n calculated by HNMR)

BY SEC the Value w.r.t PS calibration: 2400

B. NMR (1H NMR) of CL

CL sample was dissolved in $CDCl_3$. 1H NMR spectra was determined using a 500 MHz. Bruker Avance III spectrometer.



124 avenue Avro, Dorval (Montreal)
Quebec H9P 2X8 Canada
Phone : +1-514-421-5517 or +1-514-421-5506
support@polymersource.com
www.polymersource.ca

v.R-02

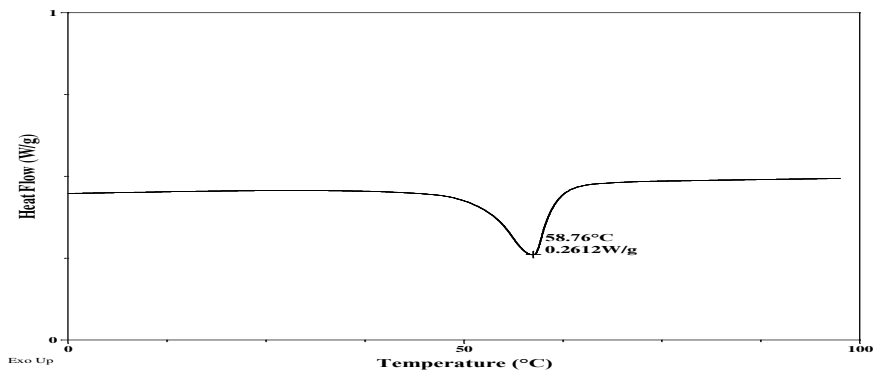


Polymer Source,™ Inc.

Thermal analysis result at a glance:

T _m (°C)	T _c (°C)	T _g (°C)
59	12	Not distinct

Melting curve for the CL sample:



Crystallization curve for the CL sample:

